

# Work Order ID 127091

Monday, December 08, 2014 9:52:58 AM

**\*127091\***

Page 1

Item ID: D3849-1

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Plate

Start Date: 12/08/14 Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 12/12/14 Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals:

Process Plan:

Date: 14-12-08

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
| D3849    | E            |

100

0.00

**\*100\***

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3849

Dwg Rev: F

Prog Rev: F

2-Deburr if necessary

110

QC2- Inspect parts off machine FAI/FAIB

0.00

**\*110\***

QC

Memo

0.00

Quality Control

DAS  
23  
9-89 14-12-22

DAS  
23  
9-89 14-12-22

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# Work Order ID 127091

**\*127091\***

Page 2

Monday, December 08, 2014 9:52:58 AM

Item ID: D3849-1      Accept      **\*N900040100\***      Setup Start **\*NS1\***  
Revision ID:      Stop **\*NS2\***  
Item Name: Plate  
Start Date: 12/08/14      Start Qty: 8.00      **\*8\***      Cust Item ID:  
Required Date: 12/12/14      Req'd Qty: 8.00      **\*8\***      Customer:  
Reference:

Approvals:      Process Plan:      Date:      Tooling:      Date:      Run Start **\*NR1\***  
QC:      Date:      SPC (Y/N):      Date:      Stop **\*NR2\***

| Sequence ID/<br>Work Center ID | Operation<br>Description                      | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty     | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp    |
|--------------------------------|-----------------------------------------------|----------------------|---------|--------|--------------|-------------------|---------------|------------------|-------------------|
| 120                            | QC8- Inspect parts - second check             | 0.00                 |         |        |              |                   |               |                  |                   |
| <b>*120*</b>                   |                                               |                      |         |        |              | (8)               | 14-12-22      |                  | DAS<br>9-89       |
| QC                             | Memo                                          | 0.00                 |         |        |              |                   |               |                  |                   |
| Quality Control                |                                               |                      |         |        |              |                   |               |                  |                   |
| 130                            |                                               | 0.00                 |         |        |              |                   |               |                  |                   |
| <b>*130*</b>                   |                                               |                      |         |        |              | DAS<br>30<br>9-89 |               |                  |                   |
| Brake NC                       | Memo                                          | 0.00                 |         |        |              |                   |               |                  |                   |
| Brake NC                       | Form as per dwg using DT8179 & DT8155         |                      |         |        |              |                   |               |                  |                   |
| 210                            | QC5- Inspect part completeness to step on W/O | 0.00                 |         |        |              |                   |               |                  |                   |
| <b>*210*</b>                   |                                               |                      |         |        |              | (8)               |               |                  | DAS<br>38<br>9-89 |
| QC                             | Memo                                          | 0.00                 |         |        |              |                   |               |                  |                   |
| Quality Control                |                                               |                      |         |        |              |                   |               |                  |                   |

FEB 18 2015

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------------|----------------------------------|----------------------------------------|------------------------------------|----------------------------------------------|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>                                                                                                                                                 | Water Jet <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>                                                                                                                                                 | Prod. Eng. Coord. <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>                                                                                                                                                 | Rec/Store/Packaging <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>                                                                                                                                                 | Supplier <input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |                                    |                                    |                                      |                                    |                                    |                                            |                                  |                                        |                                    |                                              |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**Work Order ID 127091****\*127091\***

Page 3

Monday, December 08, 2014 9:52:58 AM

Item ID: D3849-1

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Plate

Start Date: 12/08/14

Start Qty: 8.00

**\*8\***

Cust Item ID:

Required Date: 12/12/14

Req'd Qty: 8.00

**\*8\***

Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run

Start

**\*NR1\***

QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

220

Identify as per dwg & Stock Location: W/A002

0.00

**\*220\***

Packaging

Memo

0.00

Packaging

815-03-23MAL

230

QC21- Final Inspection - Work Order Release

0.00

**\*230\***

QC

Memo

0.00

Quality Control

MLJ15-03-23MF  
15-3-23

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |
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| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
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| Design        |      |      |     |                                                     |                   |                    |             |              |              |
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| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

# Picklist Print

Monday, December 08, 2014 9:53:03 AM

Page 1

Work Order ID: 127091

**\*127091\***

Parent Item: D3849-1

**\*D3849-1\***

Parent Item Name: Plate

Start Date: 12/08/14

Required Date: 12/12/14

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A NEW ISSUE 12-08-23 JLM VERIFIED BY:DD IPP  
Rev:B 12.09.11 AS PER DWG REV.D DD VERF:JLM

| Component Item ID/<br>Item Name | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand | Qty per Kit | Total<br>Qty | Qty<br>Issued | Date<br>Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| M304S18GA                       |                        | Purchased     |             | No                  |                  | 100             | sf                 | 393.3355       | 3.585       | (31)         |               |                |        |

**\*M304S18GA\***

304/316 .050 Sheet

**\*\***

14-12-22

| <u>Location</u> | <u>Loc Qty</u> | <u>Loc Code</u> |
|-----------------|----------------|-----------------|
| MAT020          | 393.33546      |                 |
| 117188          | 3              |                 |
| 117766          | 5              |                 |
| 120604          | 5              |                 |
| 122325          | 3              |                 |
| 123155          | 3              |                 |
| 124572          | 35.73          |                 |
| 125552          | 1.1155         |                 |
| M126098         | 7.6042         |                 |
| M126647         | 31.55          |                 |
| M128254         | 31.3224        |                 |
| M128435         | 35.45          |                 |
| M128864         | 11.98206       |                 |
| M129530         | 46.6185        |                 |
| M130345         | 52.9628        |                 |
| M130923         | 120            |                 |

130923

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

|                                                              |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

| Root Cause    | Date | Step | Qty | Description of work order update or non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|-----------------------------------------------------|-------------------|--------------------|-------------|--------------|--------------|
| Design        |      |      |     |                                                     |                   |                    |             |              |              |
| Doc/Data      |      |      |     |                                                     |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |                                                     |                   |                    |             |              |              |
| Handling/Pre  |      |      |     |                                                     |                   |                    |             |              |              |
| Material      |      |      |     |                                                     |                   |                    |             |              |              |
| Operator      |      |      |     |                                                     |                   |                    |             |              |              |
| Offset/Setup  |      |      |     |                                                     |                   |                    |             |              |              |
| Process       |      |      |     |                                                     |                   |                    |             |              |              |
| Supplier      |      |      |     |                                                     |                   |                    |             |              |              |
| Training      |      |      |     |                                                     |                   |                    |             |              |              |
| Transport     |      |      |     |                                                     |                   |                    |             |              |              |
| Unapproved    |      |      |     |                                                     |                   |                    |             |              |              |

### FAULT CATEGORY

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crimp/Kink/Ripple/Wave<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Crushing<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Marks/Chatter<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damage/Defect<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Fit/Function | <input type="checkbox"/> Folio/Program<br><input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete/Unqualified<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Misaligned/off center<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Off-set<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Outside Dimensions<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge<br><br><input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Set-up<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><br><input type="checkbox"/> Other |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



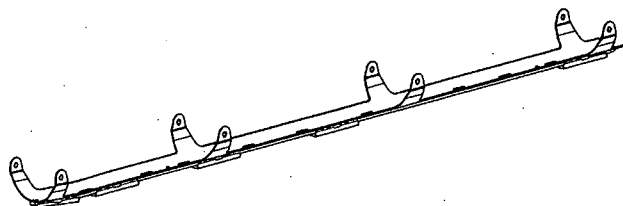
|                                            |  |                     |         |
|--------------------------------------------|--|---------------------|---------|
| <b>DART AEROSPACE LTD</b>                  |  | <b>Work Order:</b>  | 127091  |
| <b>Description:</b> Wearplate              |  | <b>Part Number:</b> | D3849-1 |
| <b>Inspection Dwg:</b> D3849 <b>Rev:</b> D |  | <b>Page 1 of 1</b>  |         |

### FIRST ARTICLE INSPECTION CHECKLIST

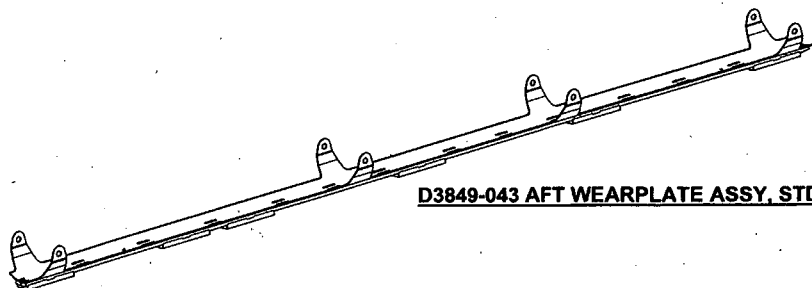
| Drawing Dimension | Tolerance     | Actual Dimension | Accept | Reject | Method of Inspection | Comments |
|-------------------|---------------|------------------|--------|--------|----------------------|----------|
| Ø0.375            | +0.006/-0.001 | 0.377"           | —      |        | V                    | Jkmo,    |
| 0.125             | +/-0.010      | 0.124"           | —      |        | V                    |          |
| 0.88              | +/-0.030      | 0.88"            | —      |        | V                    |          |
| 2.433             | +/-0.010      | 2.433"           | —      |        | V                    |          |
| 6.642             | +/-0.010      | 6.642"           | —      |        | V                    |          |
| 2.45              | +/-0.030      | 2.45"            | —      |        | V                    |          |
| 18.000            | +/-0.010      | 18.000"          | —      |        | T                    | Jkmo     |
| 36.000            | +/-0.010      | 36.000"          | —      |        | T                    |          |
| 51.313            | +/-0.010      | 51.313"          | —      |        | T                    |          |
| 7.00              | +/-0.030      | 7.00"            | —      |        | V                    |          |
| 41.50             | +/-0.030      | 41.50"           | —      |        | T                    |          |
| 7.72              | +/-0.030      | 7.72"            | —      |        | V                    |          |
| 54.26             | +/-0.030      | 54.26"           | —      |        | T                    |          |
| 0.050             | +/-0.010      | 0.049"           | —      |        | V                    |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |
|                   |               |                  |        |        |                      |          |

|                                 |  |                               |  |                              |  |
|---------------------------------|--|-------------------------------|--|------------------------------|--|
| <b>Measured by:</b> DAS 23 9-89 |  | <b>Audited by:</b> DAS 9 9-89 |  | <b>Preliminary Approval:</b> |  |
| <b>Date:</b> 14-12-22           |  | <b>Date:</b> 15-03-24         |  | <b>Date:</b>                 |  |

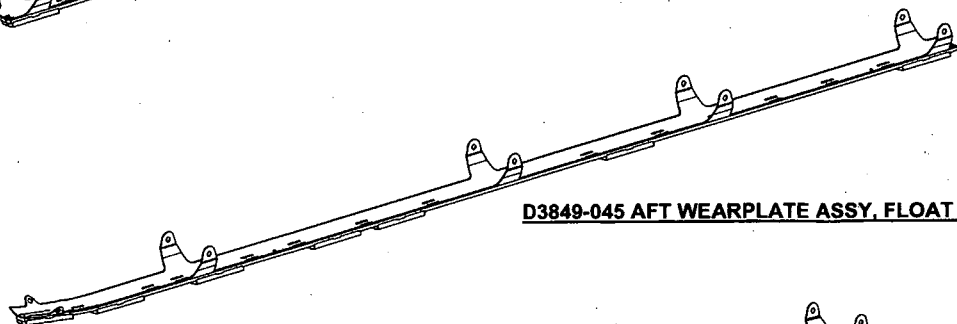
| Rev | Date     | Change                           | Revised by | Approved |
|-----|----------|----------------------------------|------------|----------|
| A   | 09.10.01 | New Issue                        | KJ         |          |
| B   | 12.10.26 | Dimensions updated per Dwg Rev D | KJ         |          |



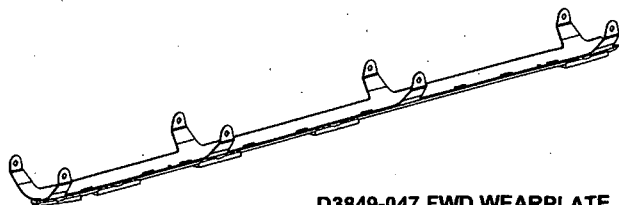
**D3849-041 FWD WEARPLATE ASSY, STD GEAR**



**D3849-043 AFT WEARPLATE ASSY, STD GEAR**



**D3849-045 AFT WEARPLATE ASSY, FLOAT GEAR**



**D3849-047 FWD WEARPLATE, FLOAT GEAR**

*Handwritten:* 14-12-08  
127091

| ITEM | QTY<br>-041 | QTY<br>-043 | QTY<br>-045 | QTY<br>-047 | P/N                 | DESCRIPTION                    |
|------|-------------|-------------|-------------|-------------|---------------------|--------------------------------|
| 1    | X           |             |             |             | D3849-041           | FWD WEARPLATE ASSY, STD GEAR   |
| 2    |             | X           |             |             | D3849-043           | AFT WEARPLATE ASSY, STD GEAR   |
| 3    |             |             | X           |             | D3849-045           | AFT WEARPLATE ASSY, FLOAT GEAR |
| 4    |             |             |             | X           | D3849-047           | FWD WEARPLATE ASSY, FLOAT GEAR |
| 11   | 1           |             |             |             | D3849-1             | PLATE                          |
| 12   |             | 1           |             |             | D3849-3             | PLATE                          |
| 13   |             |             | 1           |             | D3849-5             | PLATE                          |
| 14   |             |             |             | 1           | D3849-7             | PLATE                          |
| 15   | 1           |             |             | 1           | D3901-1             | BAR                            |
| 16   |             | 2           |             |             | D3901-3             | BAR                            |
| 17   |             |             | 2           |             | D3901-5             | BAR                            |
| 21   | A/R         | A/R         | A/R         | A/R         | 2059B               | HARDCOAT                       |
| 22   | A/R         | A/R         | A/R         | A/R         | TEXTURED<br>COATING | SEALANT                        |

**RELEASED**

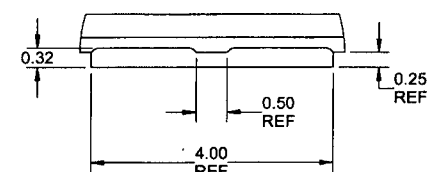
2014 NOV 24 *qp*  
ECN 14-628

|            |                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                      |               |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| E          | TEXTURED COATING WAS 4714 ROCKGUARD (BOM TABLE), CHANGE NOTE 10 (SH 2, 3, 4, 5), 8.49 LBS WAS 7.86 LBS (SH 3, NOTE 7), 10.25 LBS WAS 9.83 LBS (SH 4, NOTE 7), 4.66 LBS WAS 4.60 LBS (SH 5, NOTE 7)                                                                                                                                                                                                                     | AK                                                                                                                                                                                                                                                                                   | 14.08.07      |
| D          | REVISED FLAT PATTERN - CHANGED SLOT LOCATIONS TO MATCH D3901-1/3/5 BARS (ZN B6-8, B3-6, B6-7, C2-7, B6-8, B2-8, B7-9, B2-9)                                                                                                                                                                                                                                                                                            | DC                                                                                                                                                                                                                                                                                   | 12.08.23      |
| C          | REVISED FLAT PATTERN - CHANGE SLOT LOCATIONS. ADDED DOUBLE SLOTS AND D3901-3/5 BARS ON -043/-045. UPDATED DETAIL VIEWS. CHANGED WELD DETAILS (ZN B2-2). REMOVED D3849-1/3/5/7 GASKETS, ADD ROCKGUARD COATING, REMOVE FINISH.                                                                                                                                                                                           | DC                                                                                                                                                                                                                                                                                   | 12.08.21      |
| B          | REVISED FLAT PATTERN: Ø0.375 WAS SLOT HOLE ON D3849-1F/3F/5F (ZN A4-5, B4-7, B4-8, C2-10, B2-10); ADD D3849-047 (ZN D4-1, A4-1 & B4-5) & D3849-7/7F (ZN C4-9, A4-9); ADD SECTION K-K (ZN C5-10); 0.88 WAS 0.875 & 0.44 WAS 0.438 (ZN A3-10); ADD 0.25 & 0.88 (ZN D4-10, D3-10); ADD 0.88 & 0.44 (ZN C3-10 & B3-10); ADD FLAG NOTE (ZN A8-2, C6-2, C3-2, A8-3, C6-3, C3-3, A8-4, C6-4, C2-4); 66.87 WAS 67.36 (ZN B4-7) | RF                                                                                                                                                                                                                                                                                   | 09.06.30      |
| A          | NEW ISSUE                                                                                                                                                                                                                                                                                                                                                                                                              | RF                                                                                                                                                                                                                                                                                   | 09.03.30      |
| REV.       | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                            | BY                                                                                                                                                                                                                                                                                   | DATE          |
| DESIGN     | RF                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>DART AEROSPACE USA, INC.</b><br>KENT, WA                                                                                                                                                                                                                                          |               |
| DRAWN      | AK                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                      |               |
| CHECKED    | VS                                                                                                                                                                                                                                                                                                                                                                                                                     | DRAWING NO.                                                                                                                                                                                                                                                                          | REV. E        |
| MFG. APPR. | DD                                                                                                                                                                                                                                                                                                                                                                                                                     | D3849                                                                                                                                                                                                                                                                                | SHEET 1 OF 10 |
| APPROVED   | HS                                                                                                                                                                                                                                                                                                                                                                                                                     | TITLE                                                                                                                                                                                                                                                                                | SCALE         |
| DE APPR.   | DS                                                                                                                                                                                                                                                                                                                                                                                                                     | WEARPLATE ASSY                                                                                                                                                                                                                                                                       | NTS           |
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C3-2



C5-2

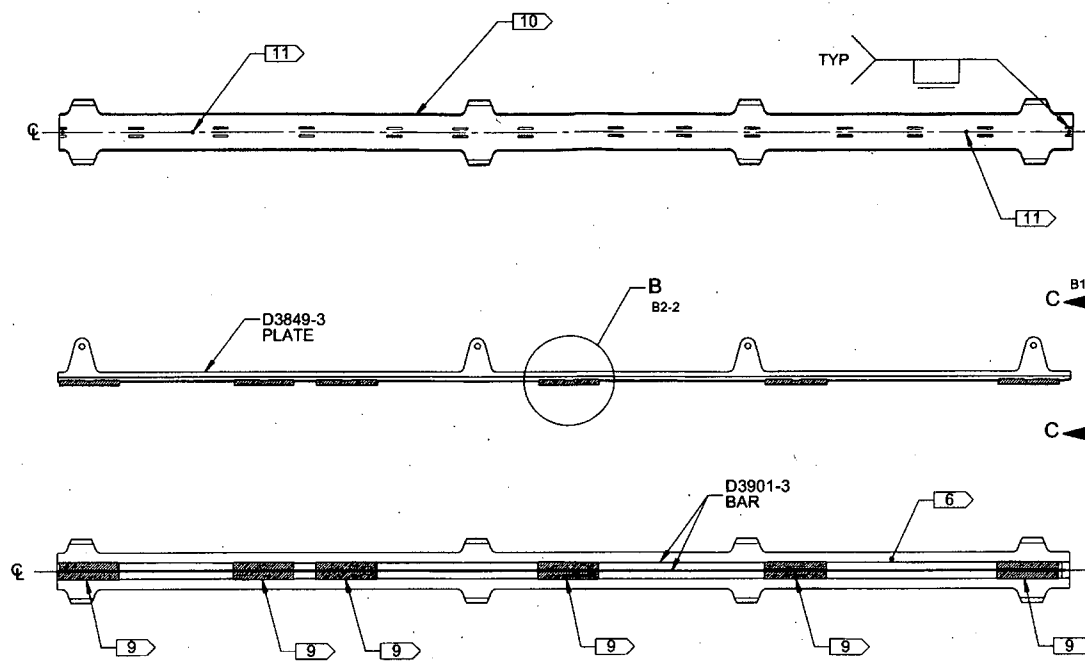
2014 NOV 24 *up*

**NOTES:**

- NOTES:**
- 1) MATERIAL: N/A
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1 AS SHOWN
  - 7) WEIGHT: D3849-041 = 4.58 lbs
  - 8) WELDING: PER QSI 004
  - 9) 2059B HARD COAT WELD, 0.32 THICK x 0.50 WIDE, FLUSH WITH D3901-1 BAR ON LATERAL SURFACES
  - 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9.
  - 11) TRANSFER DRILL  $\varnothing$ 0.188 HOLES FROM D3849-1 PLATE TO D3901-1 BAR

|          |            |          |                                                                                                                                                                                                                           |               |
|----------|------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| APPROVED | DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                           |               |
|          | DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                  |               |
|          | CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                               | REV. E        |
|          | MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                              | SHEET 2 OF 10 |
|          | APPROVED   | HS       | TITLE                                                                                                                                                                                                                     | SCALE         |
|          | DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                     | NTS           |
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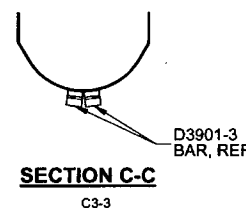
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**D3849-043 AFT WEARPLATE ASSY, STD GEAR**

**RELEASED**

2014 NOV 24

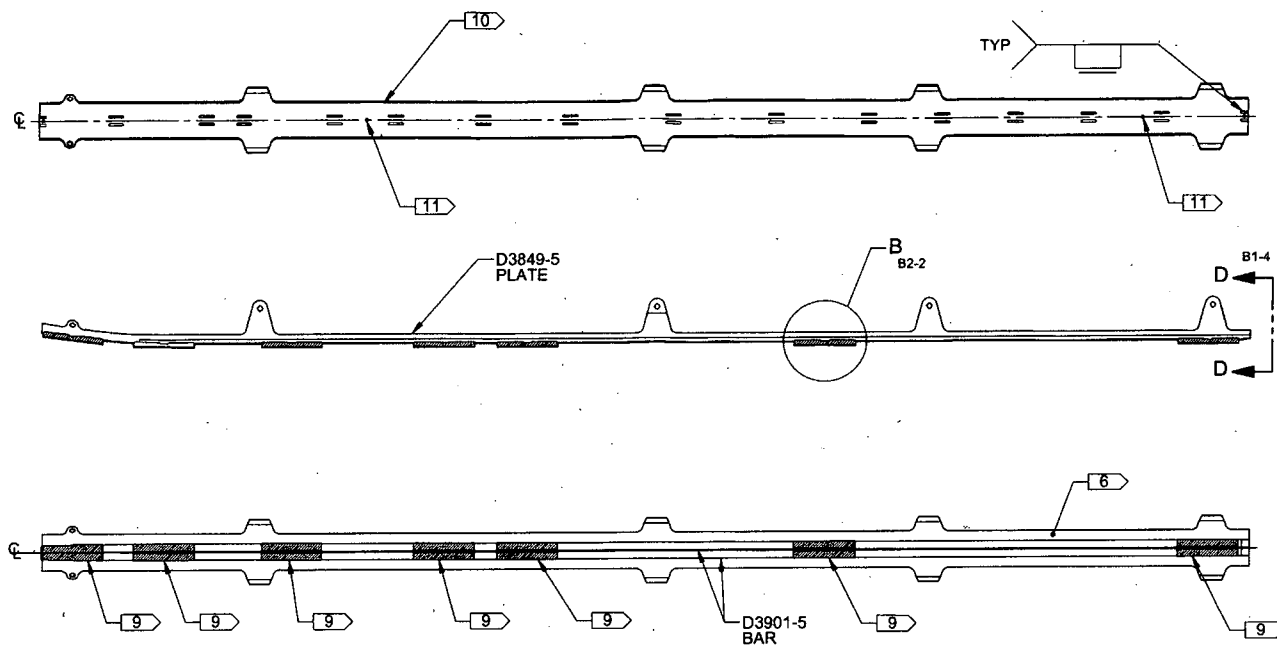


**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1 AS SHOWN
- 7) WEIGHT: D3849-043 = 8.49 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.32 THICK x 0.50 WIDE, FLUSH WITH D3901-3 BARS ON LATERAL SURFACES
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9.
- 11) TRANSFER DRILL  $\varnothing$ 0.188 HOLES FROM D3849-3 PLATE TO D3901-3 BARS

APPROVED

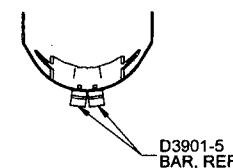
|            |          |                                                                                                                                                                                                                                                                                                     |               |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                     |               |
| DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                                                                                            |               |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. E        |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                                        | SHEET 3 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                               | SCALE         |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                                               | NTS           |
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RELEASED

2014 NOV 24

**D3849-045 AFT WEARPLATE ASSY, FLOAT GEAR**



**SECTION D-D**

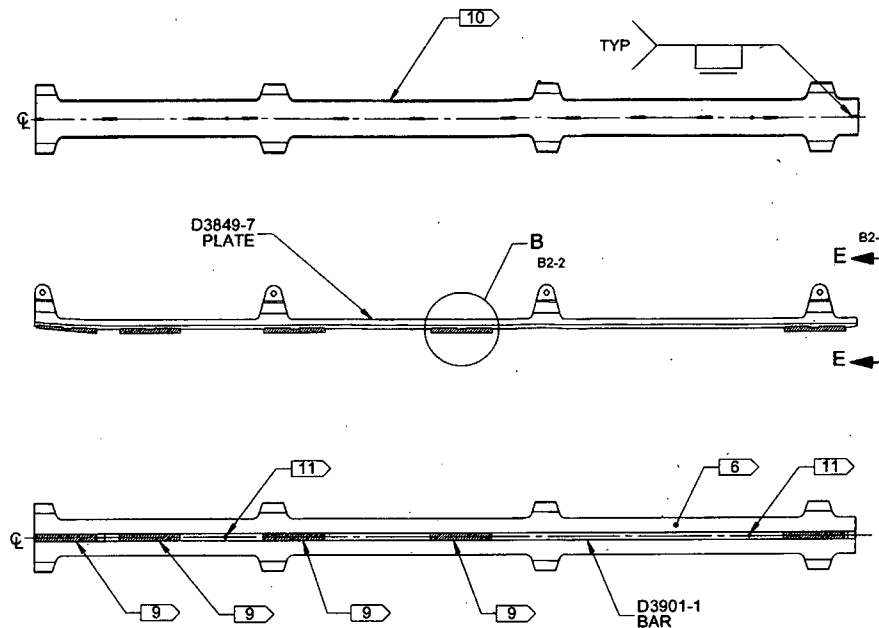
C2-4

**NOTES:**

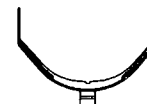
- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1 AS SHOWN
- 7) WEIGHT: D3849-045 = 10.25 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.32 THICK x 0.50 WIDE, FLUSH WITH D3849-5 BARS ON LATERAL SURFACES
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9.
- 11) TRANSFER DRILL  $\phi$ 0.188 HOLES FROM D3849-5 PLATE TO D3901-5 BARS

APPROVED

|            |          |                                                                                                                                                                                                                                                                                                     |               |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                     |               |
| DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                                                                                            |               |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. E        |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                                        | SHEET 4 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                               | SCALE         |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                                               | NTS           |
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**D3849-047 FWD WEARPLATE, FLOAT GEAR**



**SECTION E-E**

C3-5

**RELEASED**

2014 NOV 24 *dp*

**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1 AS SHOWN
- 7) WEIGHT: D3849-047 = 4.66 lbs
- 8) WELDING: PER QSI 004
- 9) 2059B HARDCOAT WELD, 0.32 THICK x 0.50 WIDE, FLUSH WITH D3901-1 BAR ON LATERAL SURFACES
- 10) COAT ENTIRE TOP (CONCAVE) SURFACE WITH TEXTURED COATING, 0.020-0.040 THICK, PER DART QSI 005 4.9.
- 11) TRANSFER DRILL  $\varnothing 0.188$  HOLES FROM D3849-7 PLATE TO D3901-1 BAR

APPROVED

|            |          |                                                                                                                                                                                                                                                                                                     |               |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                     |               |
| DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                                                                                            |               |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. E        |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                                        | SHEET 5 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                               | SCALE         |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                                               | NTS           |
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0.3 REF

R38.5

49.51

**D3849-1 PLATE**  
(MAKE FROM D3849-1F)

A6-10

0.050  
REF

7.72

Ø0.188 THRU  
2 PL

Ø2-10

G

R0.38  
TYP

18.000

H  
B3-10

2.45

A4-6

2.433  
TYP

6.642  
4 PL

R0.06  
2 PL

105°  
TYP

R0.50  
TYP

54.26 REF

49.27

43.51

41.50

40.00

34.00

29.00

23.00

18.69

14.38

10.06

7.00

5.75

0

**D3849-1F FLAT PATTERN**

R0.06  
TYP

0.13  
REF

0.50

**DETAIL I**

C2-6  
B2-8

**RELEASED**

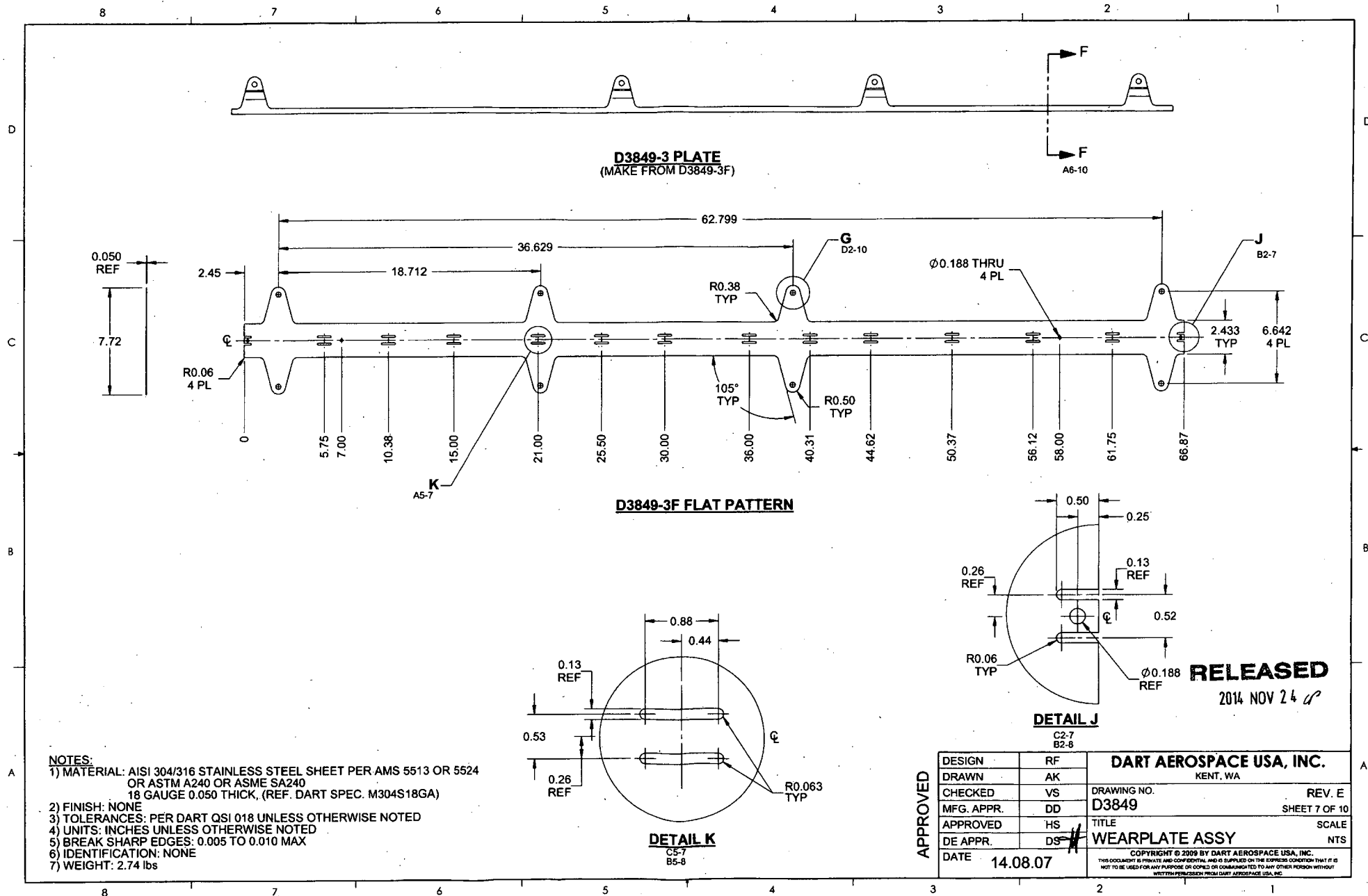
2014 NOV 24 *qp*

**NOTES:**

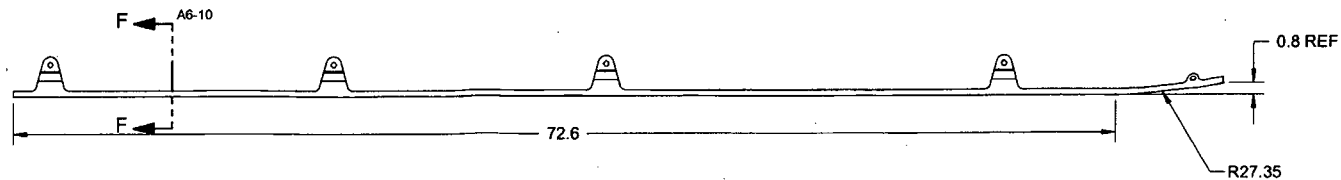
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240  
18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.30 lbs

APPROVED

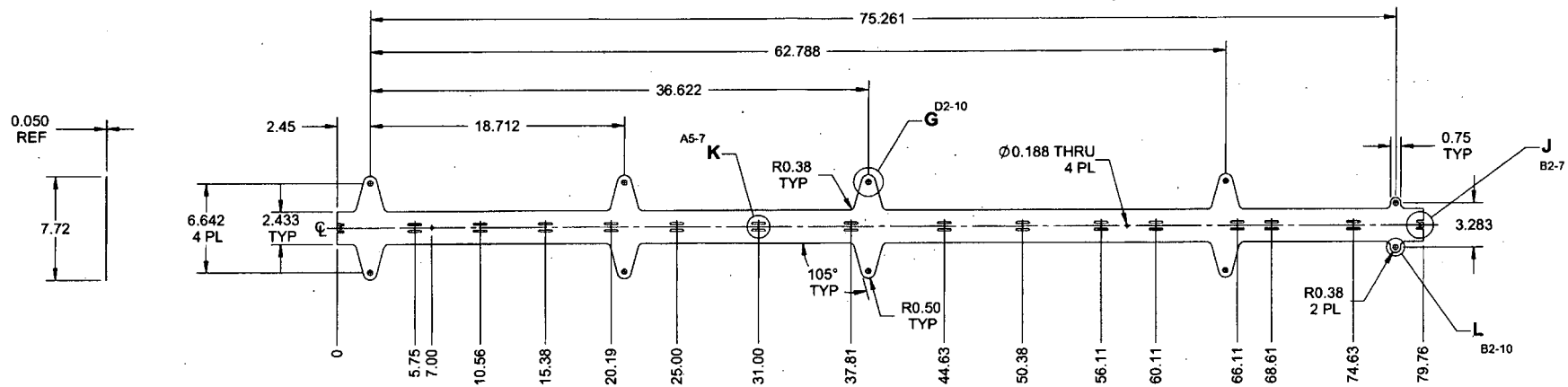
|            |          |                                                                                                                                                                                                                                                                                                                   |               |
|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                                   |               |
| DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                                                                                                          |               |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                                                       | REV. E        |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                                                      | SHEET 6 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                                             | SCALE         |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                                                             | NTS           |
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**D3849-5 PLATE**  
(MAKE FROM D3849-5F)



**D3849-5F FLAT PATTERN**

**RELEASED**

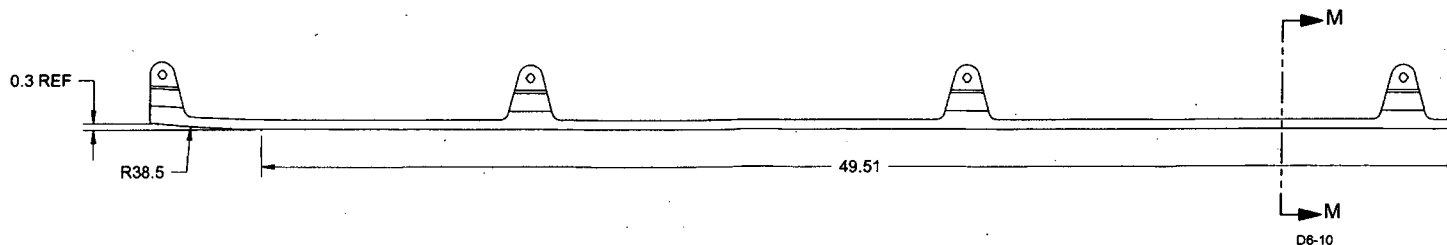
2014 NOV 24

**NOTES:**

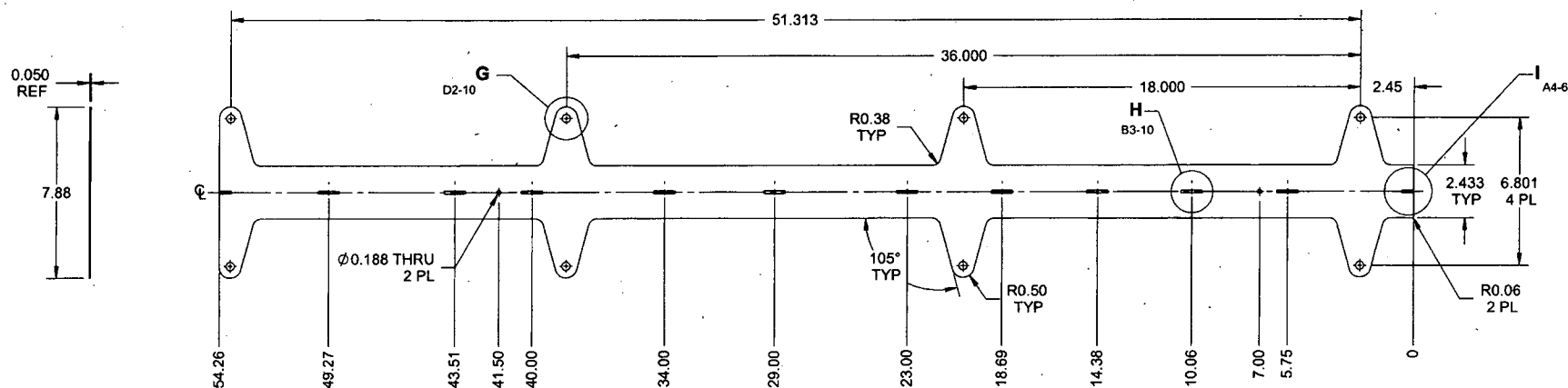
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240  
18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 3.17 lbs

APPROVED

|            |          |                                                                                                                                                                                                                                                                                     |               |
|------------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b><br>KENT, WA                                                                                                                                                                                                                                         |               |
| DRAWN      | AK       |                                                                                                                                                                                                                                                                                     |               |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                         | REV. E        |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                        | SHEET 8 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                               | SCALE         |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                               | NTS           |
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**D3849-7 PLATE**  
(MAKE FROM D3849-7F)



**D3849-7F FLAT PATTERN**

**RELEASED**

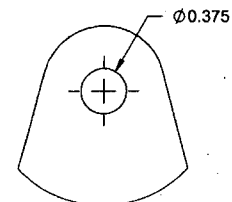
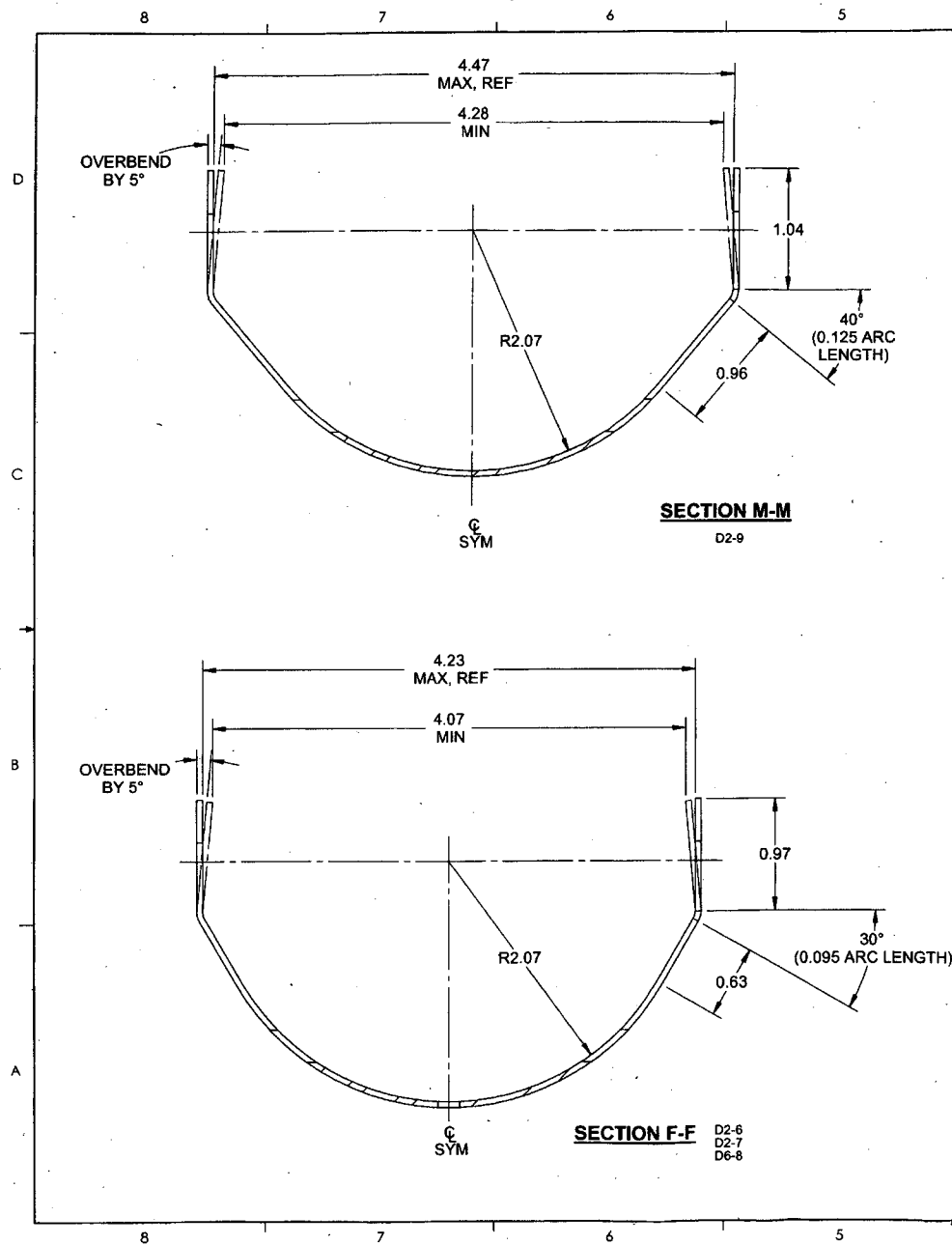
2014 NOV 24

**NOTES:**

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL SHEET PER AMS 5513 OR 5524 OR ASTM A240 OR ASME SA240  
18 GAUGE 0.050 THICK, (REF. DART SPEC. M304S18GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 2.32 lbs

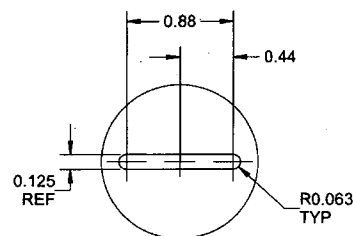
APPROVED

|                                                                                                                                                                                                                                     |          |                                              |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------------------------------------------|---------------|
| DESIGN                                                                                                                                                                                                                              | RF       | <b>DART AEROSPACE USA, INC.</b>              |               |
| DRAWN                                                                                                                                                                                                                               | AK       | KENT, WA                                     |               |
| CHECKED                                                                                                                                                                                                                             | VS       | DRAWING NO.                                  | REV. E        |
| MFG. APPR.                                                                                                                                                                                                                          | DD       | <b>D3849</b>                                 | SHEET 9 OF 10 |
| APPROVED                                                                                                                                                                                                                            | HS       | TITLE                                        | SCALE         |
| DE APPR.                                                                                                                                                                                                                            | DS       | <b>WEARPLATE ASSY</b>                        | NTS           |
| DATE                                                                                                                                                                                                                                | 14.08.07 | COPYRIGHT © 2009 BY DART AEROSPACE USA, INC. |               |
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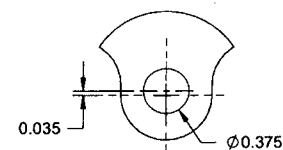
**DETAIL G**  
SLOT DETAIL TYP

C4-6  
C4-7  
C4-8  
C6-9



**DETAIL H**  
SLOT DETAIL TYP

C3-6  
B3-9



**DETAIL I**  
DETAIL TYP

B2-8

**RELEASED**  
2014 NOV 24

APPROVED

|            |          |                                                                                                                                                                                                                                                                                                     |                |
|------------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| DESIGN     | RF       | <b>DART AEROSPACE USA, INC.</b>                                                                                                                                                                                                                                                                     |                |
| DRAWN      | AK       | KENT, WA                                                                                                                                                                                                                                                                                            |                |
| CHECKED    | VS       | DRAWING NO.                                                                                                                                                                                                                                                                                         | REV. E         |
| MFG. APPR. | DD       | <b>D3849</b>                                                                                                                                                                                                                                                                                        | SHEET 10 OF 10 |
| APPROVED   | HS       | TITLE                                                                                                                                                                                                                                                                                               | SCALE          |
| DE APPR.   | DS       | <b>WEARPLATE ASSY</b>                                                                                                                                                                                                                                                                               | NTS            |
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